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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/856,175

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Hiromu Ueshima

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01/30/2004

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EXAMINER

MCCARTNEY, LINZY T

ART UNIT

PAPER NUMBER

2671

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,175

Applicant(s)

UESHIMA ET AL.

Examiner

Linzy McCartney

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-10 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,741,182 to Lipps et al. (Lipps) in view of U.S. Patent No. 6,517,438 to Tosaki et al. (Tosaki) further in view of U.S. Patent No. 5,414,256 to Gurner et al. (Gurner).

a. Referring to claim 1, Lipps discloses an input device to be moved in a three-dimensional space by a game player (Fig. 1, 4) and a game processor for causing a change in the ball character displayed on screen (column 3, lines 13-17). Lipps does not explicitly disclose signal output means incorporated in said input means to output an acceleration correlated signal according to an acceleration upon moving said input device in the three-dimensional space; enabling means for enabling said signal output means to output the acceleration correlated signal when a level of the acceleration correlated signal is equal to or larger than a predetermined level, and a game processor for receiving the acceleration correlated signal and causing a change in the ball character displayed on the screen. Tosaki discloses signal output means incorporated in said input means to output an acceleration correlated signal according to an acceleration upon moving said input device in the three-dimensional space (column 16, lines 32-35; Fig. 8); and a game processor for receiving the acceleration correlated signal (column 8, line 65- column 9,

line 2). Gurner discloses outputting a signal when a signal is equal to or larger than a predetermined level (column 10, lines 19-32). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Lipps with the teachings of Tosaki and Gurner. The suggestion/motivation for doing so would have been because Lipps discloses using more information about the swing to perform a better simulation of the game (column 1, lines 45-47) and the acceleration sensor disclosed by Tosaki allows physical quantities such as strength of movement and device orientation to be detected (column 7, lines 17-25) which can be used to provide more realism in a baseball simulation (column 16, lines 40-58) and because outputting a signal after the signal has become equal to or larger than a predetermined level prevents noise from sending inappropriate signals (Gurner, column 10, lines 29-32).

b. Referring to claim 2, Lipps does not explicitly disclose said game processor determines a moving speed of said input device on the basis of the acceleration correlated signal, and a parameter for the change in the ball character on the basis of at least the moving speed. Tosaki discloses said game processor determines a moving speed of said input device on the basis of the acceleration correlated signal (column 7, lines 49-53), and a parameter for the change in the ball character on the basis of at least the moving speed (column 16, lines 45-57).

c. Referring to claim 3, Lipps discloses acceleration correlated signal transmitting means for transmitting the acceleration correlated signal in a wireless manner (column 2, lines 54-58). Gurner discloses outputting a signal when a signal is equal to or larger than a predetermined level (column 10, lines 19-32).

d. Referring to claim 4, Lipps discloses said image processing means generates image information including the ball character by use of image data stored in said information storage medium under control of said data operation processing means (column 3, lines 13-17; column 6, lines 1-7). Lipps does not explicitly disclose said game processor including at least operation processing means, image processing means, sound processing means, and a memory; said operation processing means executing a program code stored in said information storage medium and calculating at least a position, moving direction, and speed of the ball character on the basis of an acceleration correlated signal outputted from said signal output means; said sound processing means reproducing sound by use of sound data stored in said information storage medium under control of said operation processing means; said memory being used for at least said operation processing means to hold a progress and result of an operation. Tosaki discloses said game processor including at least operation processing means, image processing means, sound processing means, and a memory (column 8, lines 28-43); said operation processing means executing a program code stored in said information storage medium and calculating at least a position, moving direction, and speed of the ball character on the basis of an acceleration correlated signal outputted from said signal output means (column 8, lines 28-31; column 16, lines 45-54); said sound processing means reproducing sound by use of sound data stored in said information storage medium under control of said operation processing means (column 8, lines 41-43); said memory being used for at least said operation processing means to hold a progress and result of an operation (column 8, lines 31-33). At the time the invention was made, it would have

been obvious to a person of ordinary skill in the art to modify the apparatus of Lipps with the teachings of Tosaki. The suggestion/motivation for doing so would have been because Lipps discloses using more information about the swing to perform a better simulation of the game (column 1, lines 45-47) and the acceleration sensor disclosed by Tosaki allows physical quantities such as strength of movement and device orientation to be detected (column 7, lines 17-25) which can be used to provide more realism in a baseball simulation (column 16, lines 40-58).

e. Referring to claim 5, Lipps does not explicitly disclose wherein said information storage medium includes a non-volatile semiconductor memory. Tosaki discloses wherein said information storage medium includes a non-volatile semiconductor memory (column 8, lines 33-34). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Lipps with the teachings of Tosaki. The suggestion/motivation for doing so would have been because Lipps discloses using more information about the swing to perform a better simulation of the game (column 1, lines 45-47) and the acceleration sensor disclosed by Tosaki allows physical quantities such as strength of movement and device orientation to be detected (column 7, lines 17-25) which can be used to provide more realism in a baseball simulation (column 16, lines 40-58).

f. Referring to claim 6, Lipps discloses said ball game is a baseball game (Abstract) and said input means including a bat input device (Fig. 1). Lipps does not explicitly disclose said game processor causing a change in the ball character according to the acceleration correlated signal from said bat input device. Tosaki discloses said game

processor causing a change in the ball character according to the acceleration correlated signal from said bat input device (Fig. 8; column 16, lines 32-61). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Lipps with the teachings of Tosaki. The suggestion/motivation for doing so would have been because Lipps discloses using more information about the swing to perform a better simulation of the game (column 1, lines 45-47) and the acceleration sensor disclosed by Tosaki allows physical quantities such as strength of movement and device orientation to be detected (column 7, lines 17-25) which can be used to provide more realism in a baseball simulation (column 16, lines 40-58).

g. Referring to claim 8, Lipps discloses said input device including a racket input device (column 4, lines 19-20). Lipps does not explicitly disclose said game processor causing a change in the ball character according to the acceleration correlated signal from said racket input device or said ball game is a table-tennis game Tosaki discloses the ball game is a table-tennis game (column 17, lines 43-46) and said game processor causing a change in the ball character according to the acceleration correlated signal from said racket input device (column 17, lines 65-66; Abstract). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Lipps with the teachings of Tosaki. The suggestion/motivation for doing so would have been because Lipps discloses using the disclosed invention for other sports, including tennis (column 1, lines 54-56) using more information about the swing to perform a better simulation of the game (column 1, lines 45-47) and the acceleration sensor disclosed by Tosaki allows physical quantities such as strength of movement and

device orientation to be detected (column 7, lines 17-25) which can be used to provide more realism in a simulation (column 7, lines 17-25).

h. Referring to claim 9, Lipps discloses wherein said acceleration correlated signal transmitting means includes an infrared-ray emission element and a light receiving element which receives the infrared-ray from said infrared-ray emission element (column 2, lines 52-58).

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lipps in view of Tosaki further in view of Gurner as applied to claim 3 yet further in view of U.S. Patent No. 5,833,549 to Zur et al. (Zur).

a. Referring to claim 10, Lipps does not explicitly disclose wherein said game processor evaluating a peak value of a moving speed of said input device based upon the acceleration correlated signal, and then evaluating a parameter for the change of said ball for the change of said ball character on the basis of at least the peak value of the moving speed of said input device. Zur discloses calculating the peak speed of said input device and then and then evaluating a parameter for the change of said ball for the change of said ball character on the basis of at least the peak value of the moving speed of said input device (column 10, line 49-63). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the apparatus of Lipps by calculating the peak speed of the input device as taught by Zur. The suggestion/motivation for doing so would have been because it would reliably predict the trajectory of the ball (column 2, lines 12-15).

Allowable Subject Matter

4. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Linzy McCartney** whose telephone number is **(703) 605-0745**. The examiner can normally be reached on Mon-Friday (8:00AM-5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mark Zimmerman**, can be reached at **(703) 305-9798**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

ltm
January 20, 2004



MARK ZIMMERMAN
PATENT EXAMINER
TECHNOLOGY CENTER 2600